

INVC191

This Inverter is designed and adjusted for cold fluorescent lamp used in the LMG5320XUFC, LMG74xx, LMG7380 STN liquid crystal display modules.

FEATURES

- ◆ Very small, very thin and low power consumption design
- ◆ Adaptable to a wide range of input voltages
- ◆ External On/Off switching of backlight
- ◆ Dimmable from 100 down to 50 percent with a variable resistor
- ◆ Low noise

GENERAL DATA

Item	Value	Unit
Module Dimensions	95 x 15	mm
Weight	11.0 max	g
Output Power	1.35 nominal	W
Efficiency	60 min	%
Mean Time Between Failure (MTBF)	60.000 min	hrs

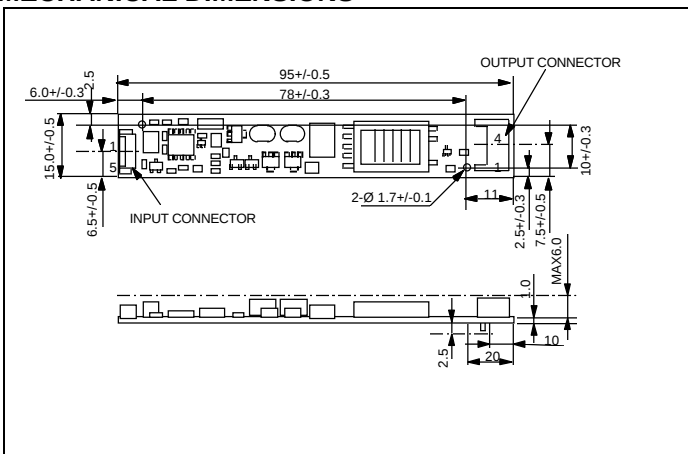
ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Condition	Min	Max	Unit
Input Voltage	V_{MAX}	-	-	18.0	V
Operating Temperature	T_{OP}	-	5	50	°C
Storage Temperature	T_{ST}	-	-20	70	°C
Humidity	-	-	-	90	% RH

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min	Typ	Max	Unit
Input Voltage	V_{IN}	-	7.0	12.0	17.0	V
Input Current	I_{IN}	12V, $T=25^{\circ}\text{C}$	0.13	0.18	0.23	A
Rush Current	I_S	12V, $T=25^{\circ}\text{C}$	-	-	1.0	A
Lamp Current	I_L	12V, $T=25^{\circ}\text{C}$	3.5	4.2	4.9	mA
Lamp Power	P_L	12V, $T=25^{\circ}\text{C}$	-	1.35	-	W
Frequency	f_L	12V, $T=25^{\circ}\text{C}$	50	65	80	kHz
Dimming Range	-	12V, $T=25^{\circ}\text{C}$	-	100-50	-	%
Startup Characteristics	10°C +/- 1°C, DC 7.0V					

MECHANICAL DIMENSIONS



INPUT AND OUTPUT CONNECTORS

Input Connector	Input Housing Connector
MOLEX 53261-0510	51021-0500
Output Connector	Output Housing Connector
MITSUMI M60-04-30-134P	M60-04

INPUT CONNECTOR PIN ASSIGNMENT

Pin No	Symbol	Comment
1	VCC	7 - 17V
2	GND	-
3	CFL ON/OFF	OFF at Open, ON at Low ($V=0.8V, I=2mA$)
4	BR1	Dimming through variable resistor 5kOhm
5	BR2	Brightness max at 0 kOhm, min at 2.5 kOhm

OUTPUT CONNECTOR PIN ASSIGNMENT

Pin No	Symbol	Comment
1	CFL HV	High voltage output
2	NC	-
3	NC	-
4	CFL HV	High voltage output